

CLAIM AMENDMENTS

Please amend the claims under 37 C.F.R. §1.121(c). The following claim set replaces all prior sets of claims.

1-10. (CANCELED)

11. (CURRENTLY AMENDED) A process for the depolymerization of glycosaminoglycanes comprising:

exposing an aqueous solution to electron beam radiation, said solution ~~comprising~~ consisting essentially of:

- i) water;
- ii) a glycosaminoglycane; and
- iii) optionally, an organic compound selected from the group consisting of Formula I, Formula II, and Formula III:



wherein each R is independently selected from the group consisting of H, OH, CHO, C₁-C₆ alkyl and acyl, optionally substituted by oxygen atoms; two R groups optionally join together to form a ring, and wherein the concentration of the organic compound is from 0.1% to 5%.

12. (PREVIOUSLY PRESENTED) The process according to claim 11, wherein said exposing step is performed using a dynamic irradiation process.

13. (PREVIOUSLY PRESENTED) The process according to claim 11, wherein the glycosaminoglycane is heparin.

14. (PREVIOUSLY PRESENTED) The process according to claim 11, wherein the electron-beam radiation has an energy of from 100keV to 1000keV.

15. (PREVIOUSLY PRESENTED) The process according to claim 11, wherein the organic compound is selected from the group consisting of methanol, ethanol, n-propanol, isopropanol, n-butanol, isobutanol, glycerol, tetrahydrofurane, dioxane, diethylether, tertbutylmethylether, dioxolane, formaldehyde, glyoxal, acetaldehyde, N,N-dimethyl formamide, N,N-dimethylacetamide, N,N-diethylformamide, and N-methylpyrrolidone.

16. (PREVIOUSLY PRESENTED) The process according to claim 11, wherein the amount of radiation used is from 400kGy to 8,000kGy.